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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,694	04/17/2001	Kazuyuki Miya	L9289.01132	2565

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Stevens Davis Miller & Mosher
1615 L Street N W Suite 850
Washington, DC 20036

EXAMINER

NGUYEN, THUAN T

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,694

Applicant(s)

MIYA, KAZUYUKI

Examiner

THUAN T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/17/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 3-6, 8 and 10 in the reply filed on 6/8/04 is acknowledged. The traversal is on the ground(s) that the search for all pending claims together would not be burdensome (which indicates that the same limitations are offered in all of the claims). The Examiner reconsiders the claim languages and agrees to withdrawn the election requirement as indicated in the previous office action. All pending claims of claims 1-10 are considered and examined.

Claim Rejections - 35 USC, 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang et al. (U.S. Patent No. 6,501,788 B1).

Regarding claims 3-6, 8 and 10 for a system and its corresponding method for a radio reception section of a communication base station for noise suppression or echo cancellation (please refer to Fig. 1 for a cellular communication system with base stations and mobile terminals together with a mobile switching office and a PSTN; and

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Figs. 4 with 4A & 4B for a complete view of radio reception apparatus for use within the cellular communication system):

As for claim 3, this claim is met as Wang shows the radio reception apparatus of Figure 3 with spreading sequence detector 340 and interference canceller 370 (col. 8/line 14 to col. 9/line 38) & Figure 4 with the illustration of Figure 4A & 4B for a spreading sequence detector 340 for detecting the reception signal spread/modulated using a spreading code (see col. 6/line 64 to col. 7/line 50 for spreading codes) as well as a controlling means under hardware/or software using a digital signal processor DSP (col. 10/lines 7-16) and an interference canceller (Fig. 4B, item 370; and col. 9/line 39 to col. 10/line 16 for a complete view).

As for claim 4, this limitation is met as Wang also uses a predetermined threshold value, and the interference canceller is performed as the received signal is exceeding the threshold value (col. 6/lines 46-61).

As for claims 5-6, these limitations are met as Wang discloses the received signal is the packet signal and using transmission timing based on predetermined timing (Fig. 7, col. 1/lines 13-54 for wireless communication system using cellular digital packet data CDPD service; and col. 10/line 45 to col. 11/line 51 for timing process).

As for claims 8 and 10, these claims are for a base station equipped with the radio reception apparatus as claimed earlier in claims 3-6 and its corresponding method are rejected for the reasons given as disclosed in claims 3-6 above.

Regarding claims 1-2, 7 and 9, these claims are for an apparatus and its corresponding method for a radio reception section of a communication terminal apparatus, which applied the radio reception apparatus as addressed earlier in claims 3-6 are rejected for the reasons given in the scope of claims 3-6 above.

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Esmailzadeb (US Patent 6,259,724 B1), Madkour et al. (US Patent 6,574,270 B1), Ottoson et al. (US Patent 6,683,924 B1), and Song (US Patent 6,721,299 B1) disclose communications systems related to interference cancellation and packet timing.


5. **Any response to this action should be mailed to:**
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:
(703) 872-9306, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (703) 308-5860. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.



TONY T. NGUYEN
PATENT EXAMINER

Tony T. Nguyen
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August 17, 2004